#### DEPARTMENT OF THE ARMY

WASHINGTON, D.C. 20310



**HQDA Ltr 385-01-1** 

02 March 2001

**DACS-SF** 

# Expires 02 March 2003

SUBJECT: Improved Conventional Munitions and Submunitions

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# 1. Purpose. This letter—

- a. Restricts the use of improved conventional munitions (ICMs) and submunitions.
- b. Restricts the maintenance, characterization, and clearance of ranges and other areas known or suspected of containing ICMs and submunitions.
- c. Provides minimum requirements for controlling hazards associated with maintaining, characterizing, and clearing ranges and other areas known or suspected of containing ICMs and submunitions
- d. Does not address non-ICM/submunition unexploded ordnance (which is addressed in reference 2) or biological or chemical warfare materiel (which are addressed in reference 14).
- 2. Applicability. This letter applies to HQDA agencies and MACOMS responsible for or involved in the following—
- a. Activities involving ICM or submunitions undertaken by the Active Army, the Army National Guard of the United States, the U.S. Army Reserve, Army civilian employees, and Army contractors.
- b. Ranges and other areas owned or controlled by the U.S. Army, CONUS, and OCONUS (including active, inactive, closed, transferred, or transferring ranges) and including activities conducted by other Services on Army-owned or controlled property.
- 3. Proponent and exception authority. The proponent of this letter is the Army Chief of Staff, who has the authority to approve exceptions to this letter that are consistent with controlling law and regulation. The Chief of Staff, Army may delegate this approval authority, in writing, to the Director of Army Safety.

#### 4. References.

- a. Required publications are listed below.
- (1) HQDA (DAMO-TRO) message 151835Z APR 96, subject: Ammunition Prohibited from Use during Training.

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- (2) HQDA Numbered Letter 385-00-2, subject: Explosives Safety Policy for Real Property Containing Conventional Ordnance and Explosives.
  - (3) AR 75-15, Responsibilities and Procedures for Explosive Ordnance Disposal.
  - (4) AR 210-21, Army Ranges and Training Land Program.
  - (5) AR 385-10, Army Safety Program.
  - (6) AR 385-40, Accident Reporting and Records.
- (7) AR 385-63, Policies and Procedures for Firing Ammunition for Training, Target Practice, and Combat.
  - (8) AR 385-64, U.S. Army Explosives Safety Program.
  - (9) DA Pam 385-64, Ammunition and Explosives Safety Standards.
  - (10) FM 21-16, Unexploded Ordnance (UXO) Procedures.
  - (11) DOD 6055.9-STD, DOD Ammunition and Explosives Safety Standards.
- (12) DOD Policy to Implement EPA's Military Munitions Rule, 1 Jul 98 located at www.denix.osd.mil/denix/Public/Policy/Range/1July98MRIP.doc.
- (13) Military Munitions Rule, 62 FR 6621, 12 Feb 97, codified primarily at 40 CFR 266, Subpart M.
- (14) ASA(IL&E) Memorandum dated 5 Sep 97, subject: Interim Guidance for Biological Warfare Material (BWM) and Non-Stockpile Chemical Warfare Material (CWM) Response Activities.
- **5. Explanation of abbreviations and terms.** Abbreviations and special terms used in this letter are explained in the glossary.

# 6. Responsibilities.

- a. The Assistant Secretary of the Army (Installations and Environment) (ASA(I&E)) is responsible for establishing overall Army environment, safety, and occupational health policy. The ASA(I&E) will exercise oversight of all aspects of environment, safety, and occupational health statutory compliance. These responsibilities are carried out through the Deputy Assistant Secretary of the Army (Environment, Safety and Occupational Health).
- b. The Director of Army Safety (DASAF), Office of the Chief of Staff, U.S. Army, administers and directs the Army Safety Program as specified in AR 385-10. The DASAF will—
  - (1) Establish risk assessment criteria for ICM and submunition clearance activities.
- (2) Establish, with the Director of Training (DAMO-TR, Office of the Deputy Chief of Staff for Operations and Plans (ODCSOPS), policy on restricting the use of ICMs and submunitions.
- (3) Review U.S. Army Technical Center for Explosives Safety (USATCES) evaluations of requests for waivers to the Army restriction on maintenance, characterization, or clearance of ranges or other areas known or suspected of containing ICMs or submunitions and providing joint (with (DAMO-TR)) approval for waivers to the Army restriction.
  - c. The DCSOPS will-
- (1) Develop policy for training ranges and other training facilities required to support training (AR 210-21).
- (2) Review USATCES' evaluations of requests for waivers from the Army restriction on maintenance, characterization, or clearance of ranges or other areas known or suspected

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of containing ICMs or submunitions, and providing joint (with the ODASAF) approval for waivers from the Army restriction.

- d. The Judge Advocate General (TJAG) will provide advice on statutory and regulatory requirements affecting ordnance and explosives clearance activities.
- e. The Deputy Chief of Staff for Logistics (DCSLOG) will develop policy and guidance for the Army explosive ordnance disposal (EOD) program.
- f. The Assistant Chief of Staff for Installation Management (ACSIM) will provide guidance on the application of environmental policy for ordnance and explosives clearance plans and procedures.
  - g. The Commander, U.S. Army Technical Center for Explosives Safety (USATCES) will-
- (1) Review requests for waivers from the Army restriction on maintenance, characterization, or clearance of ranges or other areas known or suspected of containing ICMs and submunitions and provide an evaluation of each request and recommendation for approval or disapproval to the ODASAF.
- (2) Provide guidance on historical records searches to determine past usage of ICMs or submunitions.
- (3) Maintain an inventory of Army property and formerly used Defense sites (FUDS) containing ICMs and submunitions.
- h. Commanders with responsibility for ranges or other areas known or suspected of containing ICMs or submunitions will—
- (1) Ensure DAMO-TR, DALO-AMA, and USATCES are informed of any ranges or other areas known or suspected of containing ICMs or submunitions.
- (2) Ensure ranges or other areas known or suspected of containing ICMs or submunitions are clearly marked and entry to these areas is restricted and access is controlled.
- (3) Prohibit all activities on ranges or other areas known or suspected of containing ICMs or submunitions unless a waiver, approved by the DASAF and DAMO-TR) is obtained.
- (4) Follow the procedures contained in this document for requesting waivers to the restriction on maintenance, characterization, or clearance of ranges or other areas known or suspected of containing ICMs or submunitions.

#### 7. Policy.

- a. The firing, dropping, or use of ICMs or submunitions for training and demonstration by Army units or other Services, to include foreign national units, on Army ranges or other areas controlled by the Army is prohibited. This prohibition does not include ICM or submunition acceptance or RDT&E testing or testing, for intelligence purposes, of foreign ICMs or submunitions. However, when such tests are performed, the use of submunitions will be both limited to the minimum number required and restricted to specifically designated target or impact areas.
- b. The designation of areas for ICM or submunition proof testing or testing, for intelligence purposes, of foreign ICMs or submunitions requires the approval of the MACOM commanding general. This authority may not be delegated. Follow the steps listed below when designating ICM or submunitions testing areas.

- (1) The MACOM CG will notify the ODASAF, USATCES, DAMO-AMA, and OACSIM of all areas so designated.
- (2) Limit areas so designated to ICM or submunition proof testing or testing for intelligence purposes, of foreign ICMs or submunitions. All other uses will be prohibited.
- (3) Maintain a complete inventory of all ammunition and explosives tested in such areas. The inventory will include the type, full nomenclature, and number, of ICMs or submunitions tested, the date of the test, and the agency conducting the test.
- (4) Installations with ICM or submunition test ranges will develop procedures to ensure that entry into test areas in which ICMs or submunitions have been fired is restricted and access is strictly controlled and to ensure the clearance of the area following testing.
- c. Ranges or other areas known or suspected of containing ICMs or submunitions will be clearly marked at the physical location and on installation master plans, to identify the hazard. Entry to such areas will be restricted and access controlled. If the area known or suspected of containing ICMs or submunitions is a subset of a larger area known not to contain ICMs or submunitions, access to the larger (non-ICM/submunition) area may be granted by the installation commander. However, it will be under the conditions noted in (1) through (4) below. These are in addition to other range entry or UXO safety requirements.
  - (1) There is a compelling need for personnel to enter the larger area;
  - (2) There are no activities taking place in the restricted (ICM/submunition) area;
- (3) All personnel authorized to enter the non-ICM/submunition area are provided an explosives safety briefing that identifies the types of ICMs and submunitions that could be encountered and action that should be taken if discovered
  - (4) Access into the larger area is coordinated with range and safety personnel.
- d. Before access is granted to range impact areas, the installation range operations office will determine, to the extent possible based on range records and procedures, whether the range contains or is suspected of containing, ICMs or submunitions. Access to areas known or suspected of containing ICMs or submunitions are prohibited unless permitted under a waiver approved according to paragraph 8. Also, Range Operations, in coordination with installation safety and EOD representatives, will determine, and monitor implementation of, safety controls required for personnel access. Personnel permitted to enter any area containing or suspected of containing ICMs or submunitions will be fully apprised of the potential dangers and the safeguards to be exercised. When necessary, personnel will have the appropriate escort.
- e. Ranges or other areas known or suspected of containing ICMs or submunitions will not be entered by anyone (including government, military, or civilian personnel, military EOD personnel, or contractor personnel) for range maintenance, characterization, or clearance activities without a waiver approved per paragraph 8.
- f. Range control or safety personnel will report areas known or suspected of containing ICMs or submunitions on Army ranges or other areas immediately through command channels to ODCSOPS (DAMO-TR), ODASAF, ODCSLOG (DALO-AMA), and USATCES. At a minimum, the report will include location, type of ICM or submunition suspected, the boundaries (by coordinates) of the area suspected of containing ICMs or submunitions. Also, include the suspected source (for example, weapon system and event in which the ICM or submunitions were most likely used), the date of discovery, and a point of contact. Lastly, if available, include digital pictures of the discovered item. Notify local supporting EOD units.
- g. There may be situations that present a compelling need to clear ICMs or submunitions from a range or other area, or to enter, for purposes of range maintenance, areas known or suspected of containing ICMs or submunitions. In such situations, a waiver

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to the restriction on maintenance, characterization, or clearance of ranges or other areas known or suspected of containing ICMs or submunitions will be considered on a case-by-case basis. Waivers will be approved only when the increased explosives safety risk associated with exposure to ICMs or submunitions is fully justified. (An example would be if the presence of ICMs or submunitions poses an unacceptable, uncontrolled, unavoidable threat to DOD personnel or members of the public or when ICM or submunition clearance or range maintenance is required as a prerequisite to a mandated transfer of real property).

- h. Maintenance, characterization, and clearance on ranges or other areas involving munitions that are not considered ICMs or submunitions but that have sensitive mechanisms for initiating the explosives firing mechanism (for example. the M83 4-pound fragmentation 'Butterfly' bomblet or the M54 series 4-pound incendiary bomb) are not addressed by this policy. However, plans for maintenance, characterization, or clearance of such munitions can be evaluated at HQDA (ODASAF).
- i. In the event emergency destruction of an ICM or submunition located outside of a range (or other area associated with ICMs or submunitions) is required, emergency destruction by Army EOD units may be authorized. This may be without HQDA approval as specified in reference 12.

#### 8. Waivers.

- a. Requests for waivers may be submitted by the commander of the installation or the head of the U.S. Army Corps of Engineers District. Heads of tenant activities will forward requests through the installation commander. Forward waivers through command channels (approval at each level of command is required) to Commander, USATCES. Send a sufficient number of copies so that ultimately, three copies are provided to USATCES.
  - b. Requests for waivers will include the following information, in the following order:
- (1) The purpose and scope of the proposed activities (as an example, maintenance, characterization, or clearance to be conducted under the waiver. Explain, in detail, the compelling reasons for the proposed activities (see para 7g).
- (2) The name and location of the areas in which the proposed activities will be conducted. Provide maps&mdash
  - (a) Showing the regional location of the site;
  - (b) Showing the boundaries of the area(s) for which the waiver is requested;
- (c) Showing, for Army-controlled property to be released outside DOD, the boundaries of the parcels to be released and listing the anticipated reuse of each parcel and any land-use restrictions to be placed on the property. (Plans for the release of such property must be submitted for review and approved by the Department of Defense Explosives Safety Board (DDESB));
- (d) Listing, for property not under DOD control (such as FUDS), the past and current use and, if known, the anticipated reuse of each area to undergo clearance and any existing land use restrictions applicable to the property.
- (e) Listing the planned clearance depths and provide site-specific data to support the depth of clearance determination.
- (3) Alternatives to the proposed activities specified in (1) above and justification for selection of the proposed activities over these alternatives.
  - (4) A description of the use of the site that led to the presence of ICMs or

submunitions. This description can consist of extracts from inventory project reports, preliminary assessments, historical records searches, archive search reports, site inspections, safety surveys, engineering evaluations/cost analyses, or other appropriate sources.

- (5) Characterization of the terrain with regard to soil, topography, and vegetation factors that may impact ordnance and explosives detection and recovery for areas for which the waiver is requested. Delineate terrain characterization on site maps.
- (6) Information on known or suspected ICMs and submunitions in areas for which the waiver is requested. This information will include estimates of the type, location, depth, and density of ICMs and submunition and will be annotated on a site map.
- (7) Information on known or suspected unexploded ordnance (non-ICM/submunition in areas for which the waiver is requested. This information will include estimates of the type, location, depth, and density of such unexploded ordnance and will be annotated on a site map.
- (8) A description of technology and methods to be used to detect, recover, and destroy recovered unexploded ordnance, including ICMs and submunitions. When describing the technology and methods, address capabilities and limitations (to include those imposed by terrain and soil type and provide a statement specifying the smallest item the equipment is capable of detecting at the detection depth.
- (9) The number, composition, training, experience, and certifications of supervisors and members of the work teams that will be within the areas for which the waiver is requested.
- (10) An in-depth explosives safety risk assessment detailing the hazards of, and safety controls (including personal protective equipment) for, the proposed activities. Pay specific attention to the types, quantities, and locations of ICMs and submunitions potentially encountered (based on site- and munition-specific activities, hazards, and controls.) The risk assessment will be approved at the appropriate level within the requester's chain of command.
- (11) Quantity-distance (Q-D) maps for each area for which the waiver is requested. (Scaled maps of 1 inch equals not more than 400 feet are preferred. A larger scale is acceptable if distances can be shown with accuracy. If unscaled maps are used, then the maps must label distances). Maps will indicate the following:
- (a) Public withdrawal distances, ICM/submunition team separation distances, and separation distances to be employed in destruction of ICMs and submunitions. Identify every inhabited building, occupied area, and public traffic route inside these safety distances and describe measures to be taken to minimize or eliminate risk for exposures within them.
- (b) The location of magazines for the storage of demolition explosives and recovered ordnance and explosives.
- (12) Summarize EOD, technical escort unit (TEU), and contractor support. When military EOD units are involved in the range clearance activities, their portion of the operational plan will be approved by the EOD unit's chain of command.
- (13) A description of quality control and quality assurance procedures, standards, and pass/fail criteria.
- c. Whenever possible, waiver requests will be submitted at least 60 days before the date for which initiation of the proposed activities is requested. Coordination with Commander, USATCES is recommended before initiating the waiver request.
- d. Commander, USATCES will review waiver requests, coordinating with MACOMs and ARSTAF as necessary, and provide an evaluation of the waiver request and a

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recommendation to approve or disapprove the request to ODASAF. ODASAF and ODCSOPS (DAMO-TR) will provide joint approval or disapproval.

- e. If, after initiating activities under a waiver, any of the following conditions occur, activities will be stopped and the commander will submit, an amended request for waiver using the procedures prescribed in paragraph 8a. Commanders will coordinate with Commander, USATCES to determine if, based on the scope of the change in conditions, approval of the amendment can be expedited.
- (1) ICMs or submunitions of a type not specified in the current approval are encountered. The amended request for waiver will update information affected by the change. At a minimum, the amended request for waiver will update, or indicate no change to, the information required in paragraphs 8b(2)(d), 8b(6), and 8b(8)–(11).
- (2) Additional areas require maintenance, characterization, or clearance. The amended request for waiver will specify the reason for the change and update information affected by the change. At a minimum, the amended request for waiver will update, or indicate no change to, the information required in paragraphs 8b(2)–(7) and 8b(11). (Work may continue in areas as approved in the initial waiver provided safety distances are not encroached.)
- (3) The scope of work or work techniques change. The amended request for waiver will specify the reason for the change and update information affected by the change. At a minimum, the amended request for a waiver will update, or indicate no change to, the information required in paragraphs 8b(1) through (3) and 8b(8) through (13).
- 4. If, after initiating activities under a waiver, the number or composition of the characterization teams, clearance teams, or EOD, TEU, or contractor support changes, a correction to the request for waiver will be forwarded through command channels to Commander, USATCES, ODASAF, and ODCSOP. The correction will specify the reason for the change and update information affected by the change (at a minimum, the information required in paragraphs 8b(9) and 8b(12)). If the change involves military EOD units, work may not be initiated until the change is approved by the EOD unit's chain of command. Otherwise, work activities may proceed while the correction is in process.

# 9. Hazard control requirements for maintenance, characterization, or clearance of ranges or other areas.

- a. Operations will be conducted in a manner that exposes the minimum number of people to the smallest quantity of explosives for the shortest period of time.
- b. All work activities will be coordinated with and have the approval of all levels of commands and all Services involved.
- c. All work activities will be conducted according to the controls outlined in approved ordnance and explosives safety and health planning documents (for instance, explosives safety risk assessment, hazard analyses, and site safety and health plans).
- d. Only qualified UXO personnel may enter and conduct maintenance, characterization, or clearance in areas known or suspected of containing ICMs or submunitions. Qualifications for UXO personnel include the following:
- (1) Graduation from the U.S. Army Bomb Disposal School, Aberdeen Proving Ground, MD; the U.S. Naval EOD School, Indian Head, MD; the U.S. Naval EOD School, Eglin AFB, FL; the EOD Assistant Course, Redstone Arsenal, AL; the EOD Assistant Course, Elgin AFB, FL; or a DOD-certified UXO qualification course.

- (2) More than 5 years combined active duty military EOD and contractor UXO experience.
- e. The qualified UXO personnel involved in maintenance, characterization, or clearance of ranges or other areas known or suspected of containing ICMs or submunitions will receive training in the hazards of the specific ICM or submunition specified in the waiver request and the procedures to control those hazards.
  - f. Minimum team separation distance will be the larger of the following:
- (1) The distance D =KW1/3, using K =50 and W =the net explosive weight (NEW) of the munition with the greatest NEW, whether conventional or ICM/submunition; or
  - (2) Two hundred (200) feet.
- g. Whenever possible, ICMs or submunitions encountered will not be disturbed or touched, but will be blown-in-place. Before destruction, all personnel will be removed, at a minimum, beyond the specified separation distance. The separation distances for blow-in-place locations will be determined using distances described in DA Pam 385-64, paragraph 5-7c(2)(b) or allowed by DDESB-approved quantity-distance reduction methods or engineering controls.
- h. Any explosive-related incident involving injury to personnel will be immediately reported per AR 385-40. If such an incident occurs, activities will be stopped until a review and validation of procedures has been completed and approved by the commander responsible for the activities.
- i. Notify in writing, the ODASAF and the ODCSOPS (DAMO-TR) on conclusion of work activities. This notification will include an after-action report detailing the type and number of ICMs and submunitions recovered; the location, depth, and areal dispersion of the ICMs and submunitions. Also include the disposition of the ICMs and submunitions and any safety concerns associated with the work activity.

# **Glossary**

# Section I Abbreviations

This section does not contain any entries

# Section II Terms

# Characterization

The process of scanning (visually and through the use of electromagnetic detection devices) the surface or subsurface of an area to determine locations, types, depths, extent, and density of ICMs and submunitions.

#### Clearance

The identification and removal or on-site destruction of ordnance and explosives.

#### Improved conventional munitions

Munitions characterized by the delivery of two or more anti-personnel, anti-materiel, or antiarmor submunitions by a parent munition.

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# Range maintenance

Repair of maneuver damage, repair of environmental damage to ranges and training facilities, or reconfiguration of a training area.

#### **Submunition**

#### Section III

# **Special Abbreviations and Terms**

This section contains no entries.

By Order of the Secretary of the Army:

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